

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

- 1.-7. (canceled)
8. (currently amended) A method for producing a thin-film magnetic head, comprising:
  - forming a magnetic core having magnetic layers; and
  - forming a magnetic gap film facing said magnetic core;
  - wherein a magnetic layer, of said magnetic layers, is formed by electroplating in a plating bath having pH value of 2 or less;
  - wherein said magnetic layer contains Co, Ni, and Fe, with  $20 \leq \text{Co} \leq 40$  wt%,  $0 < \text{Ni} \leq 2$  wt%, and  $60 \leq \text{Fe} \leq 80$  wt%, and has a saturation magnetic flux density of 23,000 gauss or more; and
  - wherein said magnetic layer which is formed by electroplating is the nearest plated layer to said magnetic gap of said magnetic layers.
9. (previously presented) A method for producing a thin-film magnetic head as defined in claim 8, wherein said magnetic core includes an upper magnetic core and a lower magnetic core.
10. (previously presented) A method for producing a thin-film magnetic head as defined in claim 9, wherein either of said upper magnetic core or said lower magnetic core has said magnetic layer.
11. (canceled)
12. (new) A method for producing a thin-film magnetic head, comprising:
  - forming a read element;
  - forming a first magnetic layer above said read element;
  - forming a magnetic gap film above said first magnetic layer;

forming a coil and insulating layer above said first magnetic layer;  
forming an underlayer for electroplating above said magnetic gap by sputtering;  
forming a second magnetic layer on said underlayer by electroplating;  
wherein at least a first part of said second magnetic layer contains Co, Ni, and Fe, with  $20 \leq \text{Co} \leq 40 \text{ wt\%}$ ,  $0 < \text{Ni} \leq 2 \text{ wt\%}$ , and  $60 \leq \text{Fe} \leq 80 \text{ wt\%}$ , and has a saturation magnetic flux density of 23,000 gauss or more.

13. (new) A method for producing a thin-film magnetic head, according to claim 12,  
wherein said second magnetic layer is electroplated in a plating bath having pH value of 2 or less.

14. (new) A method for producing a thin-film magnetic head, according to claim 12,  
wherein at least a second part of said second magnetic layer contains NiFe which has a higher Ni percentage than said first part; and  
wherein said first part is closer to said magnetic gap compared to said second part.

15. (new) A method for producing a thin-film magnetic head, comprising:  
forming a read element;  
forming a first magnetic layer above said read element;  
forming a magnetic gap film above said first magnetic layer;  
forming a coil and insulating layer above said first magnetic layer;  
forming a second magnetic layer above said magnetic gap;  
wherein said first magnetic layer is formed by electroplating in a plating bath having pH value of 2 or less;  
wherein at least a first part of said first magnetic layer contains Co, Ni, and Fe, with  $20 \leq \text{Co} \leq 40 \text{ wt\%}$ ,  $0 < \text{Ni} \leq 2 \text{ wt\%}$ , and  $60 \leq \text{Fe} \leq 80 \text{ wt\%}$ , and has a saturation magnetic flux density of 23,000 gauss or more.

16. (new) A method for producing a thin-film magnetic head, according to claim 15,

wherein at least a second part of said first magnet layer contains NiFe which has a higher Ni percentage than said first part, and

wherein said first part is closer to said magnetic gap compared to said second part.

17. (new) A method for producing a thin-film magnetic head, according to claim 15, further comprising:

forming a NiFe layer under said first magnetic layer.